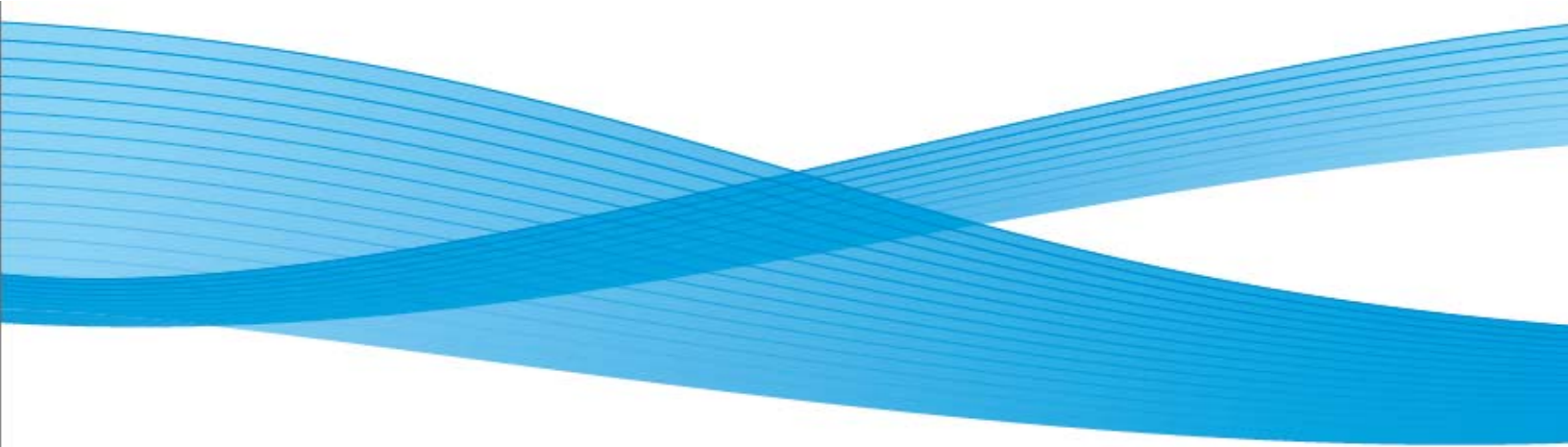




CentreWare® Web 5.2.x Installation Guide



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Contents

| | |
|--|-----------|
| Installation | 3 |
| System Requirements..... | 3 |
| Software Requirements..... | 3 |
| Microsoft Windows® Server 2008/Server 2008 R2..... | 4 |
| Support Information..... | 5 |
| Installation Considerations..... | 5 |
| Security..... | 5 |
| Proxy Server Settings..... | 6 |
| Installing..... | 7 |
| CentreWare® Web Configuration Utility..... | 8 |
| Uninstalling CentreWare® Web..... | 8 |
| Upgrading CentreWare Web..... | 9 |
| Backup/Restore Procedures..... | 10 |
| Database Migration..... | 10 |
| Modifying the CentreWare® Web Account..... | 11 |
| Administrators and Power Users Groups..... | 11 |
| Anonymous Access..... | 12 |
| Getting Started | 12 |
| Basic Setup Tasks..... | 12 |
| Configuring Smart eSolutions..... | 13 |
| RFC MIB Reference | 14 |
| SNMP Support.exe..... | 15 |
| Status Icons and Messages..... | 15 |

Installation

CentreWare® Web (CWW) application software is installed on a network server running Microsoft Windows® operation systems. This section explains installation prerequisites and considerations, including the installation and application setup procedures. Where to get support before and after installation is also provided.

SYSTEM REQUIREMENTS

The hardware recommendation listed below is what would be expected when installing on new equipment in a production server environment, but may not represent the minimum hardware needed.

| Hardware Requirement | Recommendations | |
|-----------------------------|---|---|
| Processor | If you are discovering less than 400 devices: Intel® Pentium® 4 processor at 3GHz or Intel® Core™ 2 Duo. AMD equivalent processors are supported as well. | If you are discovering more than 400 devices: Intel® Pentium® 4 processor at 3GHz or Intel® Core™ 2 Duo. AMD equivalent processors are supported as well. |
| Memory | If you are discovering less than 400 devices: 1GB of RAM, with SQL Server® 2005/SQL Server® Express installed on the same system. | If you are discovering more than 400 devices: 2GB of RAM, with SQL Server® 2005/SQL Server® Express installed on the same system. |
| Server | A separate server with SQL Server® 2005 or 2008 SQL Server® Express installed is highly recommended if: <ul style="list-style-type: none"> the number of groups configured for concurrent status polling is greater than 20 and/or <ul style="list-style-type: none"> the number of alert profiles is greater than 20 | |
| Available Disk Space | Minimum: 3GB Recommended: 20GB on 7200 rpm hard drive if collecting historical data on thousands of devices | |

Note: If you need to install CWW on a rack-mounted server, you will need a keyboard-video-mouse terminal interface to the server.

SOFTWARE REQUIREMENTS

| Software Requirement | Recommendations |
|----------------------|--|
| Operating Systems | - Windows® XP SP3 - Windows® XP x64 SP3 - Windows Server® 2003 SP2 - Windows Server® 2003 x64 SP2 - Windows Vista® Professional SP1 - Windows Vista® Professional x64 SP1 - Windows Server® 2008 - Windows Server® 2008 x64 - Windows® 7 Professional - Windows® 7 Professional x64 - Windows Server® 2008 R2 - Windows Server® 2008 R2 x64 |
| Web Server | Microsoft® Internet Information Services (IIS) 6.0 or above |
| Internet Protocol | Working Microsoft® TCP/IP v4 Stack |
| Browser | Microsoft® Internet Explorer® 6.0 or 7.0 or 8.0 |
| Access Components | Microsoft® Data Access Components (MDAC) 2.7 or later. MDAC is freely available at: http://www.microsoft.com/downloads/en/results.aspx?productID=&freetext=mdac\$DisplayLang=en |
| Microsoft® .NET | Microsoft® .NET 3.5 |

| Software Requirement | Recommendations |
|----------------------|---|
| Framework | Note: The .NET Framework is not installed with CWW and needs to be installed prior to running the installation for CWW. |
| Database Server | <p>Minimum: For new installations of CWW, where a customer-provided Microsoft SQL Server® is not available, install the Microsoft SQL Server® 2005 Express database that is included with the CWW installer or download it for free from the Microsoft® Web site.</p> <p>Note: If the Microsoft SQL Server® 2005 Express database software included with Xerox CentreWare® Web is installed, it will automatically be correctly configured. Otherwise, the default install of SQL Server® 2005, 2008, or Express is only configured for the "Shared Memory" protocol. CWW requires the "Named Pipes" or "TCP/IP" protocols in SQL 2005 or 2008. Please be sure to enable "Named Pipes" or "TCP/IP".</p> <p>Recommended: Use SQL Server® 2005/2008 Standard/Enterprise if available in the customer's IT environment.</p> |
| Other Components | <p>Minimum: AJAX 2.0. AJAX is freely available at: http://www.microsoft.com/downloads/details.aspx?FamilyID=ca9d90fa-e8c9-42e3-aa19-08e2c027f5d6&displaylang=en</p> |

MICROSOFT WINDOWS® SERVER 2008/SERVER 2008 R2

Installation of CentreWare® Web on any of the Microsoft Windows Server ®2008 platforms requires enablement of the Web Server role. The Web Server role can be enabled in the Server Manager utility. In addition to the Web Server role, CentreWare® Web and the .NET 3.5 Framework installation requires that certain role services be enabled prior to installation. Below are the required role services:

To install the .NET 3.5 Framework feature:

- Role Services Required:
 - Web Server
 - .NET Extensibility
 - Request Filtering
 - Windows Process Activation Services
 - Process Model
 - .NET Environment
 - Configuration APIs

To install CentreWare® Web:

- Role Services Required:
 - Web Server (IIS)
 - Common HTTP Features
 - ✓ Static Content
 - ✓ Default Document
 - ✓ HTTP Errors
 - Application Development
 - ✓ .NET Extensibility
 - ✓ ASP.NET
 - ✓ ISAPI Extensions
 - ✓ ISAPI Filters
 - ✓ CGI
 - Security
 - ✓ Basic Authentication
 - ✓ Windows Authentication
 - ✓ Digest Authentication

- Management Tools
 - ✓ IIS Management Console
 - ✓ IIS Management Scripts and Tools
 - ✓ Management Service
- IIS 6 Management Compatibility
 - ✓ IIS 6 Metabase Compatibility
 - ✓ IIS 6 WMI Compatibility
 - ✓ IIS 6 Scripting Tools
 - ✓ IIS 6 Management Console

SUPPORT INFORMATION

Documentation

The CentreWare® Web Evaluation Guide and the CentreWare® Web Installation Guide are available in Adobe® Portable Document Format (PDF) format on the Web at www.xerox.com/centwareweb. Click the **User Documents** link to access the available documents list.

Readme File

The Readme file provides new information, support information, and updates that may be more current than what is provided in the documentation and online help. This file is located in the application installation directory: **C:\Program Files\Xerox\CentreWareWeb\readme.txt** The file is also available on the Web at www.xerox.com/centwareweb. Click the **User Documents** link to access the available documents list.

Internet Support

Visit Xerox support on the Web at www.xerox.com/centwareweb. Click the **Support** link to access the support information.

Telephone Support

For additional assistance, go to www.xerox.com/centwareweb and obtain the telephone number for support in your specific region.

INSTALLATION CONSIDERATIONS

Installation Location

You should consider the physical sites and network bandwidth when choosing the installation location of the CentreWare® Web server. These items include the number of devices to be managed, as well as the anticipated scheduling impacts and network traffic during discovery, status renewal, email notifications, and device management work processes.

NTFS

For security functionality, you must install CentreWare® Web on systems running NTFS. If you do not have NTFS, there will be no security access checking.

Selecting an Account

During software installation, you will be prompted to select an account for the application. You can change the account using the CentreWare® Web Configuration Utility application or using Windows® Administrative Tools.

SECURITY

Security is an important consideration when installing and using tools and applications. This section provides background and basic information about the security methods used in the application.

Print Queue Management

The application can monitor print queues on Windows® XP, Windows® 2003, Windows Vista®, or Windows® 2008 workstations in addition to printers. Printing problems can occur on printer queues or on printers. The queue management capability allows you to monitor and troubleshoot the problems in an end-to-end fashion (from queue to printer).

To get detailed information on a print queue, you must have local administrator privileges on the actual server where the print queue is attached. You can configure CWW to use a domain user account, and if that account has administrative privileges to the server where the queues reside, CWW can monitor and troubleshoot issues with those queues.

Security Features

CentreWare® Web uses the security features built into Microsoft Windows® operating systems including:

- User authentication and authorization
- Services configuration and management
- Secure Terminal Services support
- Group policy deployment and management
- Internet Connection Firewall including:
 - Security Logging settings
 - CMP settings

Microsoft Active Directory®

The recommended installation configuration for CentreWare® Web in a Windows Server® 2003 or Windows Server® 2008 environment is to install the application using the domain administrator's account of the highest domain in the Microsoft Active Directory® (Active Directory) tree. This will allow the application to have permissions to manage (add and remove) queues throughout the directory tree or domain.

CentreWare® Web works with Active Directory® and NTFS security. For more information, visit the Microsoft® Web site at www.microsoft.com.

PROXY SERVER SETTINGS

If you are using a proxy server to connect to the Internet, you must configure the proxy server or change settings in your browser to prevent the proxy server from interfering with browser authentication to CentreWare® Web. You can configure the proxy server once you have installed the application. Proxy server settings may be required when using the Auto Driver Download feature or when enabling SMart eSolutions since communication is required outside the firewall.

1. Open CWW.
2. Navigate to **Administration>E-mail & External Servers**.
3. Select **Use Proxy Server** proxy.
4. Add and verify the server address.
5. Add and verify the proxy server port.
6. If proxy security is required, add the username, domain, and password of the proxy server. Contact your administrator for more information.
7. Click **Test** to verify the proxy server connection and authentication information that you entered. CWW will display an Internet Connection Test Passed message when the test is successful.

INSTALLING

Obtaining the Installer

1. Access the Xerox Web site at www.xerox.com/centrowareweb and locate the executable (.EXE) file for CWW.
2. Download the file.

Running the Installer

When installing the application software, the user who is logged on must have administrator privileges. If the SQL server resides on a different server, then both servers must be domain members and the logged-on user must have administrator privileges on the remote SQL Server as well.

1. Run the .EXE file to extract the files and begin the installation. The installation program checks to see if the Microsoft®.NET framework is installed. If it is not, then the installation will stop. Please install the required Microsoft .NET framework as described in the Software Requirements section.
2. At the Welcome screen, click **Next**.
3. Read and accept the license agreement. Click **Next**.
4. If you want CWW to create an account for you, select **Create Local Account** or select **Specify Existing Account** to use an account that is in the local administrators group.
5. When finished, click **Next**.

Note: This account drives all the processes of CWW. It is important to consider the account's rights/privileges for using the management features of the application like Windows® print queue management.

6. Enter the user information based on your selection from the previous page.
7. If the installer detects a database instance from a previous installation, CWW will allow the database to be upgraded or a new database to be created, which will overwrite the existing database.
8. Specify a SQL Server® 2005 option:
 - Select **Install SQL Server® 2005 Express Edition**. This is the default option and will install a free version of the SQL Server®.
 - Or, if you are using a database from a previous installation, or a SQL Server® 2005 to manage the database, select **Use an existing database server**.
9. Click **Next**.
10. Accept the default destination folder for the database or click **Change** to select another location.
11. Click **Next**.
12. Accept the default Web site or select another Web site.
13. Click **Next**.
14. Accept the default destination folder for the application or click **Change** to select another location.
15. Click **Next**.
16. Click **Install** to install the application. This may take several minutes.
17. When the installation is finished, the Getting Started Wizard Welcome screen opens. This optional wizard quickly configures CWW by performing an initial discovery. You can always change these settings from the Administration area of CWW.

18. Click **Cancel** to exit the wizard and installation; otherwise, do the following to perform an initial discovery:
 - a. Click **Continue** to run the Getting Started Wizard.
 - b. Select the number of printers to locate. The Least Printer option performs an IP Easy Discovery and is the fastest method.
 - c. Click **Continue**.
 - d. To set up the SMTP server for e-mail status alerts, enter the appropriate information. You can also test the connection after entry by clicking **Send Test**.
 - e. Click **Continue**.
 - f. If you are using SMart eSolutions or Auto Driver Download, you must configure a proxy server. The wizard detects the current proxy server settings of the application server's administrator account and populates the screen. Make any changes if necessary. See the Proxy Server Settings section for more information.
 - g. Click **Continue**. The Completed page opens, and shows a summary of settings for the Getting Started Wizard.
 - h. Click **Finish** to run the initial discovery. When finished, the wizard exits and returns to the CWW homepage.
 - i. Access the Printers view page to view discovered printers.

Note: See the Readme file for new information, support information, and current updates which may impact the installation and configuration. The file is located in the installation directory at C:\program files\Xerox\CentreWareweb\readme.txt. You can access the file after installation is finished from: **Start> (All) Programs>Xerox>CentreWare Web >Readme**.

Accessing the Application

After the application is installed, access it using one of the following methods:

- On the server where the application is installed, navigate to **Start> (All) Programs>Xerox>CentreWare Web>CentreWare Web**.
- From a remote computer, access the application by opening a browser and typing in the name or IP address of the server where the application is installed. For example, `http:// server name/application or site name`.

CENTREWARE® WEB CONFIGURATION UTILITY

This utility is used to view or modify the user and SQL server account for the application.

Access the utility and modify the user account using the following procedure:

1. Navigate to **Start> (All) Programs>Xerox>CentreWare Web>CentreWare Web Configuration Utility**. When accessed, a dialog displays the user and SQL server account that was configured during installation.
2. Click **CentreWare® Web Account** to change the existing username and password for the account or to use another account.
 - You can also modify the SQL Server® account in use or create a new account by entering username, password, and path information.

UNINSTALLING CENTREWARE® WEB

Use the Windows® Add/Remove Programs application to uninstall CentreWare® Web.

Note: During uninstall, you will be asked if you wish to deregister traps and SMart eSolutions. If you are uninstalling to perform an immediate upgrade on the same server, you don't need to deregister traps and SMart eSolutions. If the intent of the uninstall is to permanently remove, migrate, or perform a migration/upgrade, then it is recommended that you deregister traps and SMart eSolutions.

To uninstall CentreWare® Web:

1. Access the Control Panel.
2. Double-click **Add/Remove Programs**.
3. Select the application and click **Remove**.
4. Click **Yes** to confirm that the application is uninstalled.

UPGRADING CENTREWARE WEB

If you currently have a previous version of CentreWare® Web installed, you will first need to uninstall the application according to the above instructions, Uninstalling CentreWare Web. You can then upgrade the application by obtaining the latest CWW installer from the Xerox Web site. Major releases can be upgraded without loss of historical data, configuration settings (e.g., discovery, polling), or user-created groups.

Note: If you are upgrading from a release prior to version 4.0 or a prior release which is currently using Microsoft SQL server 2000 (or MSDE), please contact Xerox Support for alternative upgrade instructions.

Recommended: First, back up your **XrxDBCWW** and **XrxDBDiscovery** databases from the SQL Server that the currently installed CWW uses. Instructions on how to perform a backup of databases in SQL Server can be found under the Backup/Restore Procedures.

1. To upgrade from within the application, select **Administration>Advanced>Xerox CentreWare Web Updates**, or from a browser, access www.xerox.com/centrowareweb.
2. Under Free Download, click **Download Now**.
3. Choose your Operating System and Language, then click **Go**.
4. Select **CentreWare Web**.

5. Follow the instructions to download the software to your desktop.
6. After the download has completed, double-click the **setup.exe** to begin the installation process.
 - When you get to the SQL® Server section in the installation process, select **Use Existing SQL Server**, enter the **SQL server name** and the SQL® Server **User ID** and **password**.
 - When you get to the database section of the installation process, select **Use Existing Database** to ensure that any data you had collected in your previous version of CentreWare® Web will be upgraded and available for use once the installation is complete.

BACKUP/RESTORE PROCEDURES

There are two methods to back up the application SQL Server® databases, so that the entire database, or just the Discovery Database, can be restored in case of a software failure.

Method 1(Recommended Method)

To back up the databases and then restore:

1. Choose **Start> (All) Programs>Xerox>CentreWare Web>CentreWare Web Configuration Utility**.
2. Click **Databases**.
3. Click **Backup Databases**.
4. Enter a path for the backup databases
 - The path needs to be local to the instance of SQL Server for which CWW is installed.
5. Click **Backup**. The export process creates the following .BAK files:
 - **xrxDBCWW.bak**, which contains the entire database
 - **xrxDBDiscovery.bak**, which contains the Discovery database
6. Repeat steps 1 through 5, selecting **Restore Databases** in Step 3, to identify the backup location and import the .bak files, which restores the databases.

Method 2

This method uses the Microsoft SQL Server® Management Studio to back up the databases. See your Microsoft SQL Server® Management Studio documentation for more information about using the SQL tools.

To back up the databases:

1. Locate **xrxdbcww** and **xrxdbdiscovery**.
2. Right-click on each database using the SQL Enterprise tools and select **All>Tasks>Backup Database**.
3. Follow the instructions displayed on the screen.

DATABASE MIGRATION

This procedure explains how to migrate a CWW Microsoft SQL Express database to a SQL Server® 2005/2008 database. You need to perform this procedure if you have an existing SQL Express database and want to migrate to a SQL Server® database.

To perform the migration:

1. Using the Xerox CWW Configuration Utility back up the current SQL Express **xrxdbcww** and **xrxdiscovery** databases.
2. Restore the backed-up SQL Express database to the respective SQL Server databases.
3. Choose **Start>(All) Programs>Xerox>CentreWare Web>CentreWare Web Configuration Utility**.
4. Click **Databases Server**.
5. Click **Change Server**.
6. Enter the new database server and click **OK**.
7. Restart Internet Information Services (IIS).
8. Restart the Xerox Scheduler Service and Xerox Discovery Service.

MODIFYING THE CENTREWARE® WEB ACCOUNT

The application runs as the user account that is configured during installation. The account is visible by opening Windows® XP, Windows Server® 2003, Windows Vista®, or Windows 2008 Administrative Tools and viewing properties and identity. This account determines the security permissions of the application. After installation, you can modify this account by using one of the following methods:

- CentreWare® Web Configuration Utility. See the CentreWare® Web Configuration Utility section for the procedure.
- Windows® XP, Windows Server® 2003, Windows Vista®, and Windows® 2008 Administrative Tools.

To modify the account using Windows® XP, Windows Server 2003, Windows Vista®, or Windows® 2008 Administrative Tools:

1. In Control Panel, click **Administrative Tools>Component Services**.
2. From the Component Services tree, click **Component Services>Computers>My Computer>COM+Applications>Xerox CentreWare Web Components**.
3. Right-click Xerox **CentreWare Web Components** and select **Properties** to access the application properties.
4. Click the Identity tab and modify the User and Password fields as desired. Click **OK** to exit the Identity tab.
5. Close the application by right-clicking **Xerox CentreWare Web Components** and selecting **Shut Down**. The components will then automatically start as the newly selected user the next time they are used.

ADMINISTRATORS AND POWER USERS GROUPS

During installation, two Windows Security groups are created in the location where the application is installed: CentreWare® Web Administrators, Power Users and SQL Users. Members of the Administrators group have complete administrative and operational access to the application. They do not, however, have administrative privileges on the application server. Power Users can change the contents of the application database, but are not administrative in nature. Membership in this group is the minimum requirement for access to the following functions:

- Create and generate reports from the Reports page
- Troubleshoot printers using the following tools:
 - Troubleshoot Printer Action
 - Troubleshoot Printers Wizard
 - Remote Reboot Printer Action
- Creation and administration of groups using the following functions:
 - New Group page
 - Copy to Group Printer action
- Configure printers using the following tools:
 - Edit Properties

The SQL Users group is used when it is not desirable for CWW to use the Network Services account. If the SQL logon is changed, the user needs to be part of this group in order for CWW to operate properly.

The groups are standard Microsoft® users groups and are managed as other groups on your system. Use Windows® Administration Tools to add or delete users in these groups.

- Windows Server® 2003, Windows® XP, Windows Vista®, or Windows® 2008: Choose **Start>Control Panel>Administrative Tools>Computer Management>Local Users and Groups**.

ANONYMOUS ACCESS

Anyone who has access to the network where CentreWare® Web is installed can view portions of the application. The areas that anonymous or unauthenticated users can access are limited to viewing groups, printers, servers and queues, and troubleshooting. Administrative and device management functions require an authenticated user, which is defined as:

- an administrator of the server where CentreWare® Web is installed, or
- a member of the Administrators group where the application is installed, or
- a member of the Power Users group where the application is installed. Members of this group have no administrative privileges within the application, but can perform other functions that affect the database. See Administrators and Power Users Groups section for a list.

Unauthenticated users will be prompted for a valid user name and password in areas of the application where an action would modify the database, group, or Printer Properties, for example:

- New group
- Printer/queue install
- Printer/queue deletion
- Configure group
- Configure server
- Add/Delete server
- Configure directory
- Create/edit queue or printer E-Mail Alert Profiles
- Install, Upgrade, Clone or Export wizard
- Reports
- Administration

Getting Started

This chapter outlines the basic tasks that are necessary, after installing CentreWare® Web, to configure the application for use. Before you begin these tasks, you should obtain the following information:

- A list of printers you plan to manage and their associated servers
- E-mail account information, if not entered during installation
- Data collection and reporting requirements for the installation
- Group structure for the installation

BASIC SETUP TASKS

This section outlines the tasks necessary to get the application populated with information. The basic tasks to configure the application are:

- Discovering printers
- Verifying discovery
- Setting mail server parameters
- Configuring historical data collection
- Creating groups
- Adding queue servers
- Enabling SMart eSolutions (optional)

Note: For more information, see the application's online help or the Evaluation Guide available on the Web at www.xerox.com/centrewareweb.

Discover Printers

Populate the CentreWare® Web database initially with printers by running a discovery. If you did not run the Getting Started Wizard to perform an initial discovery after installation, run the wizard. You can also use Discovery Quick Configuration from the **Administration>Quick Configuration** page as an initial discovery.

Verify Discovery

After discovery concludes, use the Printers view page to verify that the printers you expected CentreWare® Web to find are in the database. If you know of printers in an error state, such as Out of Paper, they should be members of the Error group as well. Click the **Error** group (Printers view page) to verify.

Set E-mail Parameters

To allow e-mail to communicate printer alerts and send reports from CentreWare® Web are set. You must configure the e-mail setting on the Administration tab.

To access e-mail server parameters, choose **Administration>E-Mail & External Servers>Outgoing Mail Server**.

These parameters include:

- Mail server name
- CentreWare® Web e-mail account name
- Additional security information (if required)

You can use the E-Mail & External Servers page of the application to add or change these parameters at anytime.

Note: Check Status Alerts on the Network Usage Configuration page if you plan to use this feature.

Configure Historical Data Collection

If you wish to track page counts and alerts for reporting purposes, you must enable and schedule the collection of historical data. You can set collection to run as often as hourly, depending on need. To use Historical Data, you must configure historical data collection for built-in groups on the Administration>Network>Historical Data page. Custom Groups historical data collection can be enabled and configured through a Group's Configuration Group action.

Add Groups or Subgroups

You can sort network printers into different groups by using default groups, and by creating other custom groups for your site. You can organize printers into groups according to the physical location, brand, or other printer characteristic. You can also define subgroups to further sort printers.

Group membership can be either static or dynamic (automatic). Administrators assign printers to static groups manually. Automatic assignment of printers to dynamic groups is done by creating membership filters.

After verifying the success of your discovery, you can begin creating custom groups and assigning printers to them. Your implementation plan should include information that describes the groups and subgroups to create, as well as their assigned printers or filtering criteria.

Add a Print Queue Server

CentreWare® Web has the capability of installing printers on print servers using Printer Actions or the Install wizard. To enable the application to create the required print queues, print servers must reside in the CentreWare® Web database, and the application Run As account must have administrative access to them.

Adding a print server to the application makes that server available for printer installation. Any existing TCP/IP queues on the server are available for viewing and management.

To add a print server, select **Printers>Queues>Add/Delete Server**, enter server DNS name or IP address, and click the **Back** button.

CONFIGURING SMART eSOLUTIONS

Smart eSolutions is an optional feature that you can use with CentreWare® Web. This software provides automatic collection and submission of meter reads, supplies-usage data, and existing servicing data from network printers.

When enabled in the application, Smart eSolutions communicates with Xerox printers to obtain the data and sends it back to Xerox using standard Internet protocols.

Note: For installations of CentreWare® Web in the USA, you must register for automatic meter reading services on www.xerox.com using the following Registering procedure. For European installations, skip the Registering procedure and proceed to Enabling.

Registering

You register for meter reading services at www.xerox.com. To register for automatic meter reading services:

1. Open your browser to www.xerox.com.
2. Click **Account Management**.
3. Under the Meter Readings heading, click **Submit Meter Reads**.
4. Log in. Do one of the following:
 - If you are registering for services for the first time, enter your e-mail address, select **No, I am new to Xerox online**, and click **Submit**.
 - If you are a returning user, enter your email address, select **Yes, I have a password**, enter your password, enter the information required to complete registration, and click **Submit**.
5. If you are a first-time user of the meter reading feature, confirm that the printers you want to register for automatic meter reading are in the Metered Equipment List.
6. If you would like to manually submit meter readings that are due now, or view your equipment status, return to the Meter Readings Home page.
7. Otherwise, click **Log Out** to end the process.

Enabling

To enable SMart eSolutions in CentreWare® Web:

1. Open CentreWare® Web.
2. Choose **Administration>SMart eSolutions**. The SMart eSolutions page opens.
3. Select **Enable**.
4. Ensure **Automatic Device Registration** is selected.
5. Follow the instructions on the page to set up e-mail notifications.
6. Click **Save**. SMart eSolutions is now enabled.
7. Access the Printers view page.
8. Add printers to the SMart eSolutions group.

RFC MIB Reference

The application can discover any type of printing device, Xerox or non-Xerox that is connected to a network supports the SNMP v1 protocol, and has an SNMP agent running which exposes industry standard management data using:

- RFC 1213 (MIB-II for TCP/IP),
- RFC 1759 (Printer MIB v1),
- RFC 3805 (Printer MIB v2), and
- RFC 3806 (Printer Finishing MIB).








The application also queries RFC 1514 / 2790 (Host Resources MIB v1, v2) to obtain more attributes and status of the printing device. Any printer directly attached to the network that supports SNMP and the standard printer MIB (RFC 3805) is supported. The SNMP Object Identifier (OID) **sysObjectID** (1.3.6.1.2.1.1.2.0), and **ifPhysAddress** (1.3.6.1.2.1.2.2.1.6.1 or 1.3.6.1.2.1.2.2.1.6.2) must be supported, or Internet Printing Protocol (IPP). To be fully compliant the printer must support **prtGeneralReset** (1.3.6.1.2.1.43.5.1.1.3.1).

SNMP SUPPORT.EXE

Use this tool to determine which SNMP properties a networked printer supports. You supply only the IP address of the device. The tool will then determine which SNMP properties the device supports, and then indicate if the application will discover and support the device properly, based on the device's supported properties. For example, if the device does not support **hrDeviceStatus**, it is reasonable to expect that the application will not be able to obtain the status of the printer.

STATUS ICONS AND MESSAGES

The following table indicates the SNMP OIDs and values used to determine a printer's state.

| Icon/String | hrDeviceStatus | hrPrinterStatus | hrPrinterDetectedErrorState |
|---|----------------|------------------------|---|
|  Green/Up and Running | Running(2) | Idle(3) | None set |
|  Green/Printing | Running(2) | Printing(4) | Ignore |
|  Yellow/Service Required, Toner Low, Low Paper | Warning(3) | Idle(3) or Printing(4) | Could be: Service Required, Toner Low, or Low Paper |
|  Red/Service Required, Paper Jam, Door Open, No Toner, No Paper | Down(5) | Other(1) | Could be: Service Required, Paper Jam, Door Open, No Toner, or No Paper |
|  Yellow/Offline | Warning(3) | Idle(3) or Printing(4) | Could be offline |
|  Red/Offline | Down(5) | Other(1) | Could be offline |
|  Green/Up and Running | Running(2) | Other(1) | |